About AMSR SIPS: LANCE Element

About AMSR2 SIPS

As one of the LANCE Elements, AMSR2 SIPS provides AMSR2 Level 2 (L2) and L3 near real-time products. On average, these products are available within 3 hours of observation time.

About AMSR2 SIPS

Near real-time processing for AMSR2 data is being conducted by the LANCE AMSR2 Science Investigator-led Processing System (SIPS) at NASA's Global Hydrology Resource Center (GHRC) Distributed Active Archive Center (DAAC), which is jointly managed by NASA's Marshall Space Flight Center and The University of Alabama in Huntsville. Once processed, near real-time AMSR2 data can be accessed through the LANCE AMSR2 Near Real-Time Products page on the GHRC website and will be available for viewing using NASA's Worldview data visualization tool or any geographic information system (GIS) software capable of reading and visualizing data in HDF-EOS5 format.

AMSR2 standard data products designed to support scientific research will be sent to NASA's National Snow and Ice Data Center (NSIDC) DAAC. This DAAC is responsible for processing, managing, archiving, and distributing data related to snow and ice processes (particularly interactions among snow, ice, atmosphere, and the ocean). Research-quality AMSR2 data dating back to July 4, 2012, is expected to be available in 2016. The NSIDC also stores research-quality data from the AMSR-E instrument aboard NASA's Aqua satellite dating from June 2002 through October 2011.

Note: Please be aware that the LANCE AMSR2 NRT products are generated using modified versions of the AMSR-E standard product algorithms, which have not been updated to reflect the differences between AMSR-E and AMSR2 calibrations. All LANCE AMSR2 data should be used with the understanding that these are preliminary data products.

About the Products

Near real-time data is available for AMSR2, a 7-day rolling archive and provided on a best effort basis. The system is supported during normal working hours but is monitored for system failures and unexpected data outages.

These data meet the timely needs of applications such as numerical weather and climate prediction, forecasting and monitoring natural hazards, agriculture, air quality and disaster relief.

The Advanced Microwave Scanning Radiometer 2 (AMSR2) instrument launched onboard the Japanese satellite Global Change Observation Mission 1st –Water, (SHIZUKU) (GCOM-W1), on May 18, 2012. GCOM-W1's mission is to observe changes in the water cycle. Data collection began on July 4, 2012.

Note: Please be aware that the LANCE AMSR2 NRT products are generated using modified versions of the AMSR-E standard product algorithms, which have not been updated to reflect the differences between AMSR-E and AMSR2 calibrations. All LANCE AMSR2 data should be used with the understanding that these are preliminary data products.

Data Citation

Kummerow, C. 2015. NRT AMSR2 L2B Global Swath GSFC Profiling Algorithm 2010: Surface Precipitation, Wind Speed over Ocean, Water Vapor over Ocean and Cloud Liquid Water over Ocean [indicate subset used]. Dataset available online, [https://lance.nsstc.nasa.gov/amsr2-science/data/level2/rainocean/] from NASA LANCE AMSR2 at the GHRC DAAC Huntsville, Alabama, U.S.A. doi: http://dx.doi.org/10.5067/AMSR2/A2_RainOcn_NRT

Tedesco, M. 2015. NRT AMSR2 Daily L3 Global Snow Water Equivalent EASE-Grids [indicate subset used]. Dataset available online, [https://lance.nsstc.nasa.gov/amsr2-science/data/level3/daysnow/] from NASA LANCE AMSR2 at the GHRC DAAC Huntsville, Alabama, U.S.A. doi: http://dx.doi.org/10.5067/AMSR2/A2_DySno_NRT

Markus, T., W. Meier, and J. C. Comiso. 2015. NRT AMSR2 Daily L3 6.25 km 89 GHz Brightness Temperature (Tb) Polar Grids [indicate subset used]. Dataset available online, [https://lance.nsstc.nasa.gov/amsr2-science/data/level3/seaice6] from NASA LANCE AMSR2 at the GHRC DAAC Huntsville, Alabama, U.S.A. doi:http://dx.doi.org/10.5067/AMSR2/A2_SI6_NRT

Markus, T., W. Meier, and J. C. Comiso. 2015. NRT AMSR2 Daily L3 12.5 km Tb, Sea Ice Concentration Polar Grids [indicate subset used]. Dataset available online, [https://lance.nsstc.nasa.gov/amsr2-science/data/level3/seaice12] from NASA LANCE AMSR2 at the GHRC DAAC Huntsville, Alabama, U.S.A. doi:http://dx.doi.org/10.5067/AMSR2/A2_SI12_NRT

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Njoku, E. and T. Jackson. 2016. NRT AMSR2 L2B Surface Soil Moisture, Ancillary Parameters and QC EASE-Grids [indicate subset used]. Dataset available online, [https://lance.nsstc.nasa.gov/amsr2-science/data/level2/land] from NASA LANCE AMSR2 at the GHRC DAAC Huntsville, Alabama, U.S.A. doi:http://dx.doi.org/10.5067/AMSR2/A2_Land_NRT

Support

User Services Office

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Access AMSR2 SIPS Data

- HTTPS site
- User Registration (Required to access data)